

REMARKS

Claims 1-17 are pending in the application and have been rejected for the reasons stated within the Office Action mailed February 11, 2005.

With this Amendment, page 11, third full paragraph of the specification has been amended in order to correct a typographical error. No new matter has been added. Approval of the Amendment is respectfully requested.

Claims 1-17 have been rejected under 35 U.S.C. §102(e) as being anticipated by Bergh et al (U.S. Patent No. 6,749,814). The Examiner states that the microsystem as taught and described by Bergh et al. fully anticipates Applicants' micromixing claims even though Bergh et al. does not use Applicants' terminology "channels and digital channels" and "main channels that intermesh in a comb-like matter (sic)". The Examiner further states that it is implicitly implied by the teachings and function of the microprocessing system explicitly showing the figures of Bergh that the microsystem thereof functions equivalently to the micromixer as claimed.

It is respectfully submitted that the Bergh reference can neither anticipate, nor teach or suggest Applicants' claimed micromixer and that the Examiner has not established a *prima facie* case of anticipation. As stated by the Federal Circuit, "[a]nticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, *arranged as in the claim*", see *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2D 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983). Also stated by the Federal Circuit, "[i]n deciding the issue of anticipation, the trier of fact must identify the elements of the claims, determine their meaning in light of the specification and prosecution history, and identify corresponding elements disclosed in the allegedly anticipating reference", see *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ at 485.

As described in column 16, lines 20-48, Bergh discloses a chemical processing microsystem which is integrated into a material evaluation system for evaluating new materials such as catalysts. Microreactors 600 of chemical processing microsystem 10 are formed in a plurality of laminae that include an interchangeable candidate-material array 100. The material array 100 comprises a plurality of different candidate material

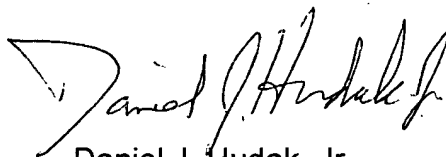
(e.g., catalysts), preferably arranged at separate, individually addressable portions of a substrate (e.g., wafer), see especially column 16, lines 43-48.

Applicants' claimed micromixer is different than the Bergh microreactor. The Examiner refers to Figures 7A-7I of Bergh when describing the Bergh distribution manifold. Therein, the Bergh distribution manifold is designed such that the flow paths to each of the microreactors have equal conductance - for example, flow paths of equal length and equal geometry - from the common port to each of the terminal ports, see column 31, lines 23-27. Accordingly, Bergh cannot anticipate mixture cells having a feeding chamber which adjoins at least one group of digital channels which intermesh in a comb-like manner with the digital channels of the group from the adjoining feeding chambers to form a mixing zone as claimed in independent claim 1. No such corresponding features in Bergh have been identified by the Examiner.

It is respectfully submitted that the claims are in condition for allowance and a Notice of such is earnestly solicited. Should the Examiner have any questions or concerns, a telephone call to the undersigned is greatly appreciated.

Respectfully submitted,

HUDAK, SHUNK & FARINE CO. L.P.A.

A handwritten signature in dark ink, appearing to read "Daniel J. Hudak, Jr.", is written over a horizontal line.

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